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ORCHARD REPLANT/INDUSTRY REVITALIZATION CONSULTATION

BACKGROUND PAPER 2

PACKINGHOUSE AND PROCESSING PROFILE

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Preface

In September, 1999 the B.C. Minister of Agriculture and Food, Corky Evans, announced his intention to extend the orchard replant program for 5 years ($25 million) and to establish a $2 million industry development trust fund. Final approval of these funds was made contingent upon the industry developing a revitalization plan that will ensure the funds are used to the most effective and productive ends possible.

Consultations leading to the development of a revitalization plan are being led by a facilitator contracted by the Ministry of Agriculture and Food. To assist these consultations, four background papers have been prepared to provide up to date information regarding the tree fruit industry. These background papers are entitled *Production/Grower Profile, Packinghouse and Processing Profile, Marketing Profile and Economic Analysis of Orchard Replanting*.

Copies of these reports are available from the Ministry of Agriculture and Food and the Okanagan Valley Tree Fruit Authority

2. Executive Summary

The B.C. tree fruit packinghouse industry is composed of four large co-operatively-owned packinghouse organizations along with a number of smaller independent packers. The large co-ops have facilities strategically located throughout the fruit-growing areas of the Okanagan and Similkameen valleys with packinghouses in Keremeos, Osoyoos, Oliver, Naramata, Summerland, Kelowna and Winfield. These plants have modern sorting and grading technology along with conventional and controlled atmosphere (CA) storage facilities that, combined, allow the co-ops to handle approximately 300 million pounds of fruit on an annual basis. The four large co-operatives are also co-owners of B.C. Tree Fruits Ltd., which acts as their exclusive marketing agency. The volume of fruit collected by these packers combined with their ability to store fruit in controlled atmosphere conditions allows B.C. Tree Fruits to market fruit to domestic and international customers on a year-round basis.

The independent packinghouses range in size from single grower operations to one large independent packinghouse that handles approximately half the volume of the smallest co-operatively-owned facility. This large independent is located in Westbank, while the majority of the smaller independents are concentrated in the southern end of the Okanagan Valley between Oliver and Osoyoos. Westbank Packers is the only independent with controlled atmosphere storage. All the other independents have limited conventional cold storage and must expedite the movement of their fruit to the marketplace. There are two major marketing agencies representing independent packers in the valley: Pro-Fresh Marketing International Ltd. in Kelowna and Nelson, Roy Associates Limited in Oliver. Combined, they currently represent more than ten of the independent houses. Other independents do their own marketing.

Approximately eighty percent of the annual B.C. apple crop is handled by the large co-op packinghouses. Conversely, only twenty percent of the province's annual soft fruit crop is channeled through the major houses. It is estimated that the remaining eighty percent is split evenly between independent packers and direct sales from fruit stands and other informal channels.

The apple processing industry is dominated by Sun-Rype Products Ltd., with annual beverage and food product sales in excess of $80 million. There are also a small number of smaller, but growing, processors making products such as fruit leathers, apple cider, premium fruit juices and pies. These businesses, along with Sun-Rype, provide a valuable and necessary outlet for the cull fruit that is the by-product of the packing industry.

The combined activities of the packinghouse and processing industries provide over a thousand person-years of seasonal employment annually throughout the valley, as well as full time employment for over two hundred people. Combined annual payrolls approach $30 million dollars. In addition, these businesses contribute several million dollars annually to the local tax base.

There is a current trend towards consolidation in the packinghouse industry, both locally and on a global basis. The most recent consolidation of major packinghouses in the Okanagan took place less than three years ago.

On a global basis, the drive towards consolidation is being fueled by parallel consolidations in the wholesale and retail sector. The resulting amalgamation of purchasing power is creating demand for global fruit suppliers who can supply large quantities of uniform quality fruit to global clients on a continuous basis. The concentration of purchasing power also gives buyers considerable leverage to extract lower prices in return for large-volume purchases. The challenge for the B.C. packinghouse and processing sector will be to find a strategic position within this ever-changing environment.

3. Methodology

Our approach has consisted of the following:

3.1 During the week of October 25 - 30 contact was made with many of the key stakeholders in the Okanagan packinghouse and processing industry and times were scheduled for in-person or telephone interviews;

3.2 The following week November 1st to 5th in-person or telephone interviews were conducted to examine the current state of the packinghouse industry structure and infrastructure and to get management's perspective on some of the key issues facing the industry in general and the packinghouse and processing sectors in particular. A list of persons interviewed can be found in Appendix A.

3.3 During stakeholder interviews, requests were made for financial and operational data such as annual reports, pack-out statistics and past summaries of grades, varieties and prices.

3.4 Through a list of industry contacts in other jurisdictions (plus contacts gathered through the interview process highlighted above) contact was made via phone, fax or e-mail to gather as much comparable information as possible from other jurisdictions with regard to structure and trends.

3.5 Information was obtained from the Internet on activities in Washington State, New Zealand, Ontario, the Maritimes, New York, South America and the Peoples' Republic of China.

4. Present Industry Structure

4.1 Packinghouse Industry Structure

The current packinghouse infrastructure consists of the following:

Four large cooperative packinghouses
One major independent packer
Two moderate-sized independent packers
Approximately 20 other smaller independent packers
Numerous growers with roadside fruit stands

4.1.1 Cooperative Packinghouses

The four major cooperative houses are co-owners of B.C. Tree Fruits Limited (BCTF) and sell the vast majority of their fruit exclusively through this agency. The relative size in terms of the number of members and overall plant capacity is shown in Table 4.1 below.

Table 4.1 Relative Size of the Four Co-operative Packing Houses

Name of Organization	Approximate No. of Growers	Fruit Packing Capacity (Bins)	Percent of Capacity Among the 4 Co-operatives
B.C. Fruit Packers Cooperative	550	155,000	45%
Okanagan North Growers Cooperative	165	70,000	20%
SunFresh Cooperative Growers	280	65,000	19%
Okanagan Similkameen Cooperative	250	55,000	16%
TOTAL	1,245	345,000	

Co-op Packing House Mission Statements

Three of the four packinghouses provided mission statements and are as follows:

B.C. Fruit Packers Cooperative Mission Statement

IN ORDER TO ASSIST OUR GROWERS TO ACHIEVE THE BEST POSSIBLE SUSTAINED LONG TERM RETURNS ON THEIR INVESTMENT WE WILL:

1. Ensure maximum packout through constant training and active management of our employees.
2. Use available technology and management skills to preserve product quality at as close to harvest condition as possible
3. Control cost through planning and management of all our resources to ensure maximum throughput at minimum cost

4. Provide market signals to growers as clearly as possible.

5. Work closely with the sales arm to determine product packaging, grading and presentation specifications that result in maximum market access.

6. Work closely with sales arm to schedule and allocate product to markets which results in all product being sold at or above target prices.

OKANAGAN NORTH GROWERS COOPERATIVE MISSION STATEMENT

GOAL:
To maximize growers' fruit returns by innovation and efficiency in the storing, packing and marketing functions and by provision of Horticultural Service.

OBJECTIVES

- **Storage**

"To provide sufficient C.A. and regular storage to accommodate growers' crop at least four years out of five."

- **Packing**

"To sort, wash, wax, label and package our growers' fruit at the lowest cost consistent with a marketable product."

- **Marketing**

"To discover the most lucrative markets for fruit and supply these markets with a product that will encourage repeat sales."

Facilitated by:
- *striking a balance between acceptable fruit quality and unacceptable fruit losses*
- *constantly updating our knowledge of what constitutes acceptable fruit quality.*

- **Horticultural Service**

"To maximize the quality and quantity of fruit received by the Co-operative by working proactively with growers."

GUIDING PRINCIPLES

1. The long-term health of the Co-operative and the financial success of its grower members is dependent on producing quality fruit, therefore OKN's long-term policies will work toward this goal.

2. OKN will provide a work environment that encourages personal growth and development of our employees, including incentives for innovation and efficiency.

3. OKN recognizes that the success of each grower-member affects the success of the packinghouse, therefore all relevant information will be communicated to growers so they may make informed farm decisions.

OKANAGAN SIMILKAMEEN COOPERATIVE MISSION STATEMENT

O.S.C. is a market-oriented organization that provides, for all Contracted Growers:

Market intelligence to maximize orchard returns for the current crop and through future varietal selections;

Horticultural expertise in the maximization of returns from all plantings;

Horticultural expertise in the selection and implementation of new planting systems and in the associated plant and fruit growing techniques;

Harvesting guidance to capitalize on market opportunities and fruit quality;

Facilities and Services to cost effectively receive, store, grade, pack and ship fruit;

Marketing and production Programs to maximize earnings;

Timely and accurate systems to record, account and pay for fruit;

To assist Growers to maximize returns at orchard level.

Governance

The cooperative packing houses each have a board of directors elected from the grower membership. Hired management and professional staff normally include a general manager, a plant manager, a secretary treasurer and a manager of horticultural operations. Some houses also employ a marketing manager who works in conjunction with B.C. Tree Fruits. Most of the existing general managers have fairly extensive experience in the tree fruit industry. Two of them have been promoted from secretary/treasurer positions.

Interviews with packinghouse management indicate most managers measure their success on their ability to minimize per-unit costs. This is attractive to their co-operative grower members as packinghouse costs are deducted from the price they receive for their fruit.

Sales/ Marketing Practices

All of the large cooperative packinghouses sell the majority of their fruit through B.C. Tree Fruits which acts as their exclusive marketing agency. B.C. Tree Fruits used to be owned by the B.C. Fruit Growers Association but is now jointly owned by the four packinghouses. Ownership is apportioned based on the volume of fruit shipped over a three-year average. B.C. Tree Fruits bears full responsibility for market development, securing sales, arranging shipments and coordinating delivery from each of the co-op packing houses. BCTF uses a pro-rating system of sales allocation, whereby each of the member packinghouses ships a portion of each major sale.

The individual packinghouses also contribute to marketing and market development activities. Packinghouse staff will join BCTF staff on marketing and market development tours and visits to buyers. They will also educate and entertain buyers by touring them

through the plant facilities, showing them fruit in storage and taking them on orchard tours.

All fruit from the cooperative packinghouses is packed in boxes bearing the B.C. Tree Fruits "Leaf" brand and label. In addition, the ends of the boxes bear the brand or label of the packinghouse it originated from. Because of the pro-rating system, house branding has not had a great impact in the marketplace other than to make it easier for buyers to identify the source in the event of a claim.

In terms of market destination, the general managers of each packinghouse provided the following estimates of domestic versus export sales of fruit from their operations.

Table 4.2 Estimated Percentage of Volume of Fruit Sold by Destination

Name of Organization	Fresh Domestic Sales %	Fresh Export Sales %	% Sent to Processor
B.C. Fruit Packers Cooperative	50	25	25
Okanagan North Growers Cooperative	55	25	20
SunFresh Cooperative Growers	50	40	10
Okanagan Similkameen Cooperative	60	30	10

All of the cooperative packinghouses sell small quantities of fruit directly from the packinghouse. This fruit usually consists of grades, sizes and varieties that cannot easily be sold through traditional channels such as very large or small apples or varieties where there may not be sufficient quantities to warrant running them over the packing line. Customers normally select and bag their own fruit from open bins. The total value of sales range from $350,000 to $1 million annually per packinghouse. While this appears to be a growing trend, it still represents less than 1% of packinghouse sales value. The two southern packing houses will also sell some soft fruits to mobile fruit retailers, independent packers and fruit stand operators.

While the cooperative packinghouses do handle some soft fruits, the focus is primarily on apples and pears. Market information from packinghouse management and industry leadership indicates that at least 80% of the apple crop is shipped through the large co-op packinghouses while the remainder is marketed through independent packers and roadside sales. Almost the inverse is true for soft fruits, where the vast majority of the crop is now sold through independents. Estimates from several of the independent packers placed the volume of soft fruit that moved through these channels as 40% through roadside and direct sales, 40% through the independent packers and 20% through the larger co-operative packinghouses.

Operational Efficiencies

To provide operational efficiencies in handling soft fruits, the large co-op packing houses have struck co-packing agreements whereby each house specializes in packing one or two soft fruit commodities and all fruit of that type is shipped to them by the other three houses. B.C. Fruit Packers handles all apricots, SunFresh packs peaches and nectarines and Okanagan Similkameen handles cherries and prunes. These co-packing arrangements mean fewer changeovers for each plant and allow plants to make investments in specialized equipment. For example, Okanagan Similkameen has recently upgraded its cherry handling equipment. This arrangement also minimizes the time and resources needed to deal with buyer claims - which tend to be more frequent on soft fruits. As one packinghouse manager explained, they now only have to deal with claims for one commodity over a relatively short time period, rather than a series of claims over the entire soft fruit packing and sales period.

Specialization of packing lines also occurs in the larger houses that operate more than one packing facility. For example, B.C. Fruit Packers has a dedicated pear facility. Even independents like Westbank Packers now direct their pears to this facility. SunFresh, which operates plants in both Naramata and the former Monashee plant in Osoyoos, has also used specialization to increase its operational efficiency. All Red Delicious varieties are packed in the Osoyoos facility whereas the softer varieties like McIntosh, Golden Delicious and Jonagolds are packed in the Naramata facility. The Okanagan North Growers Cooperative, which packs a lot of McIntosh apples, a variety that is susceptible to bruising, recently invested in a new grading line which uses much gentler fruit handling technology.

Apple Varietal Distribution by Co-op Packing House

Although shifts resulting from the previous replant program are beginning to change the varietal mix being shipped to the packinghouses, the traditional varieties like Red Delicious (35%), McIntosh (25%), Spartan (12%) and Golden Delicious (10%) continue to dominate. As Tables 4.3 and 4.4 below illustrate, there are differences in the varietal composition between houses, part of which is dictated by geography and climate.

Table 4.3 1998 Deliveries by Variety to the Co-op Packing Houses (Tons)

Variety	BCFP	SunFresh	OSC	OKN	COOP TOTAL	% OF COOP TOTAL
Red Delicious (ALL)	21,048	9,589	8,109	6,803	45,549	34.8%
McIntosh (ALL)	18,487	2,378	1,463	11,015	33,343	25.5%
Spartan	3,585	3,340	1,977	6,783	15,685	12.0%
Golden Delicious	3,663	4,177	4,108	1,085	13,033	10.0%
Royal Gala	3,952	1,276	3,059	2,311	10,598	8.1%
Fuji	1,491	1,018	1,852		4,361	3.3%
Jonagold	1,470	551	435	1,055	3,511	2.7%
Empire	403	96	69	596	1,164	0.9%
Red Rome	473	49	112	416	1,050	0.8%
Braeburn	449	115	258		822	0.6%
Granny Smith	200	73	360	164	798	0.6%
Newtown	362	90	11		463	0.4%
Elstar	168	30	41		240	0.2%
All Others				93	93	0.1%
Mutsu	74	-	15		89	0.1%
Bagged Fuji	4	-	47		51	0.0%
TOTAL	**55,830**	**22,782**	**21,916**	**30,321**	**130,849**	**100%**

Source: BCFP, SunFresh , OKN and SunFresh Packinghouses

The percentage of each variety delivered to the four major co-op packinghouse in 1998 is shown in Table 4.4 on the following page.

Table 4.4 Percentage (%) of 1998 Deliveries by Variety and Packinghouse

Variety	BCFP	SunFresh	OSC	OKN	TOTAL
Red Delicious (ALL)	37.7	42.1	37.0	22.4	34.8
McIntosh (ALL)	33.1	10.4	6.7	36.3	25.5
Spartan	6.4	14.7	9.0	22.4	12.0
Golden Delicious	6.6	18.3	18.7	3.6	10.0
Royal Gala	7.1	5.6	14.0	7.6	8.1
Fuji	2.7	4.5	8.5	0.0	3.3
Jonagold	2.6	2.4	2.0	3.5	2.7
Empire	0.7	0.4	0.3	2.0	0.9
Red Rome	0.8	0.2	0.5	1.4	0.8
Braeburn	0.8	0.5	1.2	0.0	0.6
Granny Smith	0.4	0.3	1.6	0.5	0.6
Newtown	0.6	0.4	0.0	0.0	0.4
Elstar	0.3	0.1	0.2	0.0	0.2
All Others	0.0	0.0	0.0	0.3	0.1
Mutsu	0.1	0.0	0.1	0.0	0.1
Bagged Fuji	0.0	0.0	0.2	0.0	0.0
TOTAL	100.0	100.0	100.0	100.0	100.0

Source: BCFP, SunFresh , OKN and SunFresh Packinghouses

Impact of the Previous Re-plant Program

Interviews with packinghouse managers identified three key impacts from the previous replant program:

1. Short term reductions in volume during the re-plant period,
2. Increases in the number of varieties they now have to handle, and
3. A general improvement in fruit quality, with higher packout percentages.

Packinghouse managers or their horticultural staff provided the following estimates of participation by their growers in the current replant program administered by the Okanagan Valley Tree Fruit Authority:

Table 4.5 Estimated Participation in Previous Replant Program by Packinghouse

Name of Organization	Approximate No. of Growers	Approximate Combined Orchard Acreage	Percent of Growers who Participated In Replant*
B.C. Fruit Packers Cooperative	550	5,500	40%
Okanagan North Growers Cooperative	165	2,800	70%
SunFresh Cooperative Growers	280	2,500	35%
Okanagan Similkameen Cooperative	250	3,000	80%

Source: Estimates provided by individual packinghouses * At least one acre replanted

As Table 4.5 indicates, OSC reported higher levels of participation than any of the other three large co-ops. This may reflect the emphasis on replant which is evident in their

mission statement. Also, OSC has an aggressive program to promote re-plant, which includes ensuring all their growers receive training and educational seminars. Other packinghouses also provide information and advice on new varieties.

In addition to being concerned about the potential reduction in volume, plant managers are faced with the complications arising from having to separately grade, handle and store a far more diverse product line. For larger packers, like B.C. Fruit Packers, this can create real logistical problems when it comes to things like allocating Controlled Atmosphere (CA) storage room. In spite of some potential negative operational consequences, all of the managers of the four major co-op packinghouses expressed their support for the previous replant program as well as for the proposed five-year extension to the program. They also suggested that a replant program, alone, is insufficient and needs to be supported by grower education, an effective crop insurance program and an effective set of income safety nets.

Controlled Atmosphere Storage

Other than sheer packing and storage capacity, one of the factors that distinguishes the four large co-op packing houses from the smaller independents (except Westbank Packers) is their ability to store fruit in controlled atmosphere (CA) storage. This creates a competitive advantage over the independents in terms of market timing and allows these large houses to withhold their fruit from market until the storage limitations of the smaller independents has resulted in their fruit being cleared from the market. It also allows them to supply the market virtually year-round. In addition, fruit stored in CA is generally firmer and considered to be of a higher quality than regularly-stored fruit. Recent changes in varieties and CA storage standards have reduced the mandatory storage period from 180 days down to as little as 45 days. This means that CA fruit will now compete directly with regular cold storage fruit starting as early as December.

Packinghouse Capacities and Costs

Estimates of bin/per day apple packing capacity was supplied by each of the general managers and is summarized in Table 4.6 below.

Table 4.6 Major Coop Packinghouse Packing Capacities (Bins of Apples/day)

Name of Organization	Approximate Packing Capacity (Bins/Day)
B.C. Fruit Packers Cooperative	1800
Okanagan North Growers Cooperative	900
SunFresh Cooperative Growers	350 - 400
Okanagan Similkameen Cooperative	150 - 175 *
TOTAL	3275

*Single shift with average quality fruit.

A key distinction in fruit handling is that SunFresh runs only "commit to pack" lines where the fruit is graded, sorted and packed directly into boxes, whereas the other packers have pre-grade/pre-size lines where fruit is graded, sized and put back into bins, then

packed on demand. Some houses like B.C. Fruit Packers also run double shifts as a matter of course, where smaller houses will only need to do so in high volume situations.

The managers were reluctant to discuss operational costs for individual packinghouses. However, after a meeting of the Federated Fruit Shippers Association, it was decided that B.C. Fruit Packers would provide financial statements and costs estimates which would be fairly representative of all the large co-op packinghouses. Table 4.7 shows B.C. Fruit Packers' costs per ton for the 1997 and 1998 crop. The crop in 1998 was of average to above average volume, while the 1997 crop experienced severe hail losses.

Table 4.7 BC Fruit Packers Cooperative Estimated Costs per Ton (1997 and 1998)

	1998	1998	1997
TOTAL CROP	**% of Total Costs**	**72.324 TONS**	**58.526 TONS**
Packaging Material	27.7	$ 80.86	$ 51.10
Total Wages and Benefits	37.3	108.88	99.19
Bin Repair	1.1	3.33	1.53
Building and Equipment	6.0	17.53	21.44
Depreciation and Interest	8.1	23.71	24.29
Taxes and Utilities	5.5	15.64	17.89
Hauling	1.8	5.37	6.38
Others	12.5	36.60	36.93
TOTAL COSTS	100	291.92	258.75
Miscellaneous Income		10.00	24.55
TOTAL NET COST		$ 281.92	$ 234.20

Increases in material costs in 1998 can be partially attributed to the loss of the Canadian supplier of paper fruit packing trays. Table 4.8 shows the average net packinghouse costs over the past five years has been approximately $280/ton or 14 cents per pound.

Table 4.8 BC Fruit Packers Net Costs per Ton (1994-1998)

Year	Net Cost $/Ton	Net Cost Cents/Pound
1994	267.33	13.4
1995	317.14	15.9
1996	297.75	14.9
1997	234.20	11.7
1998	281.92	14.1
Average	**279.67**	14.0

As noted in Table 4.7, above, wages and benefits account for approximately 40% of the total packing costs. Table 4.9 below provides a breakdown of 1998 wage costs by variety for one of the large co-operative packinghouses.

Table 4.9 1998 Wage Costs by Variety for a Cooperative Packinghouse

Year	Cost $/Ton	Cost Cents/Pound
Red Delicious	58.046	2.90
McIntosh	74.669	3.73

Spartan	67.943	3.40
Golden Delicious	69.858	3.49
Royal Gala	66.804	3.34
Average	**67.464**	3.37

Grower Returns

The co-operative packinghouse managers were also reluctant to provide grower returns for individual packing houses. Five-year average grower returns were provided for B.C. Fruit Packers. However, we were also able to obtain industry average variety prices from the Agricultural Risk Management Branch of the B.C. Ministry of Agriculture and Food. These are weighted average prices (after packing costs) derived from most of the major packing houses and used to determine crop insurance insurable values. See Tables 4.10, 4.11 and 4.12 below.

Table 4.10 Historic Apple Variety Prices (Grower Returns)

VARIETY	1994	1995	1996	1997	1998	Average
Braeburn	0.265	0.265	0.268	0.184	0.167	0.230
Elstar	0.158	0.158	0.134	0.151	0.168	0.154
Empire	0.120	0.195	0.168	0.111	0.096	0.138
Fuji	0.415	0.556	0.423	0.202	0.195	0.358
Gold Del	0.109	0.220	0.118	0.136	0.091	0.135
Gr. Smith	0.203	0.323	0.205	0.209	0.219	0.232
Jonagold	0.144	0.298	0.276	0.111	0.134	0.193
McIntosh	0.114	0.152	0.110	0.102	0.091	0.114
Mutsu	0.211	0.211	0.139	0.188	0.196	0.189
Newtown	0.059	0.124	0.129	0.077	0.097	0.097
Red Del	0.116	0.209	0.131	0.102	0.070	0.126
Red Rome	0.079	0.079	0.124	0.105	0.034	0.084
Royal Gala	0.493	0.628	0.464	0.361	0.289	0.447
Spartan	0.150	0.219	0.151	0.162	0.116	0.160
Sunrise	0.247	0.247	0.276	0.243	0.204	0.243
Winesap	0.024	0.024	0.153	0.257	0.096	0.111
All Apples	0.123	0.214	0.152	0.113	0.110	0.142

Source: Risk Management Branch, BCMAF - Weighted average prices from all major packinghouses

Prices for pears and soft fruits can be found in Tables 4.11 and 4.12 on the following page.

Table 4.11 Historic Pear Variety Prices (Grower Returns)

VARIETY	1994	1995	1996	1997	1998	Average
Bartlett	0.199	0.224	0.299	0.105	0.256	0.217
Bosc	0.247	0.247	0.310	0.289	0.294	0.277
D'Anjou	0.180	0.189	0.261	0.114	0.175	0.184
Flemish	0.134	0.134	0.238	0.072	0.122	0.140
All Pears	0.197	0.206	0.271	0.112	0.210	0.199

Source: Risk Management Branch, BCMAF - Weighted average prices from all major packinghouses

Table 4.12 Historic Soft Fruit Grower Returns (1994-1998)

COMMODITY	1994	1995	1996	1997	1998*	Average
Peaches	0.24	0.29	0.39	0.32	0.293	0.31
Apricots	0.26	0.33	0.68	0.41	0.398	0.42
Cherries - sweet	0.85	1.38	1.16	1.11	0.514	1.13
Cherries - sour	0.38	0.00	0.10	0.07	0	0.14
Prunes	0.11	0.22	0.32	0.24	0.316	0.22
Plums	0.38	0.38	0.50	0.47	0.316	0.43
Nectarines	0.55	0.60	0.51	0.57	0.293	0.56

Source: BCMAF Annual Horticultural Statistics * Risk Management Branch Estimates

4.1.2 Large and Moderate-Sized Independent Packing Houses

In addition to the four large cooperative packinghouses, there are also a growing number of private houses that operate in the Okanagan and Similkameen valleys. The largest of these privately-owned packinghouses is Westbank Packers. It is also the smallest packinghouse that has controlled atmosphere storage with storage capacity for approximately 20,000 bins.

The two other private packinghouses of significant size are Fairview Orchards Ltd. and Oliver Fruit House. Each of these privately-owned packinghouses currently handles approximately 10,000 bins of fruit each annually.

Governance

Governance of the larger private packinghouses is relatively simple. Most are owned and governed by one or two owners. In the case of Westbank Packers, the company is owned by two individuals. Day-to-day management is handled by a hired General Manager. Like the larger co-op houses they also have a Plant Manager and a field Horticultural Advisor. Fairview Orchards is owned and operated by two brothers who handle most of the packinghouse duties from selecting growers to loading trucks with packed fruit. Oliver Fruit House is a family-owned business with many family members involved in the day-to-day operation of the packinghouse.
Private houses can set their own quality standards and decide who they will accept fruit from. Also, because they have smaller facilities and lower overhead costs, they are not

under the same degree of pressure as the larger co-operative packinghouses to accumulate as much fruit volume as possible thus minimizing their per unit costs. Their goal, generally, is to maximize profits with equal emphasis on both cost reduction and revenue maximization. The revenue maximization side of that equation often drives them towards higher quality markets.

Sales/Marketing Practices

Both Westbank Packers and Fairview Orchards use Pro-Fresh Marketing International Ltd. as their sales agent. Oliver Fruit House handles it own marketing and sales activities. Each of these three houses provided estimates of sales destination as summarized in Table 4.13

Table 4.13 Sales Destination of Fruit Sold by Larger Independent Packinghouses

Name of Organization	Fresh Domestic Sales %	Fresh Export Sales %	% Sent to Processor
Westbank Packers	60	30	10
Fairview Orchards Ltd.	30	60	10
Oliver Fruit House	80	10	10

Oliver Fruit House sells most of its fruit into the domestic market with Safeway acting as one of their major customers. Westbank Packers also sells the majority of its fruit into the domestic market, while Fairview Orchards is more export oriented and has developed significant offshore markets for its fruit like sales of high quality Fujis into Taiwan.

Like many of the large co-op packinghouses, Westbank Packers also sells fruit directly to consumers from their packinghouse. In 1998, direct sales from Westbank Packers totaled approximately $110,000 out of a total sales value of approximately $5 million. The two smaller houses do not engage in direct sales activities.

In terms of market development, Westbank Packers and Fairview Orchards rely on Pro-Fresh Marketing for most of the current market development. All three houses host visits from buyers and brokers.

Operational Efficiencies

The private packinghouse owners and managers were reluctant to talk about operational costs. Westbank Packers estimates its operating costs to be approximately $7.50 per 40 lb. box or $375 per ton and charges from $8.25 to $8.50 a box for custom packing. All three of the larger independent packers use non-unionized labour. In the case of both Fairview Orchards Ltd. and Oliver Fruit House, a significant amount of labour is supplied by the family owner/operators.

Varietal Distribution

Data on varietal distribution was not supplied by either Oliver Fruit House or Fairview Orchards Ltd. The apple variety distribution for Westbank packers is shown in Table 4.14 below.

Table 4.14 Apple Variety Distribution (%) for Westbank Packers (1995 -1998)

Variety	1995	1996	1997	1998
Red Del	25.6	25.5	23.5	27.4
McIntosh	38.3	31.9	33.2	26.0
Spartan	18.2	15.6	16.9	17.8
Gala	2.1	4.7	6.2	7.5
Gold Del	7.5	9.8	6.1	5.4
Fuji	1.3	3.1	2.9	5.4
Jonagold	2.1	2.6	4.0	3.8
Braeburn	0.2	0.5	1.3	2.0
Gr. Smith	0.7	1.1	0.9	1.9
Earligold	0.3	0.4	0.7	0.6
Empire	0.9	0.9	1.2	0.5
Akane	0.1	0.2	0.3	0.3
Mutsu	0.2	0.2	0.3	0.3
Wnt Banana	0.2	0.2	0.2	0.3
Red Rome	0.3	0.1	0.2	0.2
Orin	0.1	0.1	0.2	0.2
Elstar	0.1	0.2	0.1	0.1
Sunrise	0.2	0.3	0.6	0.1
Sum. Red	0.0	0.0	0.0	0.1
Newtown	0.0	0.0	0.2	0.0
Diversion	2.9	6.4	2.2	0.0
Windfalls	0.4	1.1	0.3	0.0
Total Winter	99.6	99.9	99.9	99.9
Tydeman	0.4	0.1	0.1	0.1
All Apples	100.0	100.0	100.0	100.0

Source: Westbank Packers

As can be seen in the above table, although the percentage of Galas has shown a steady increase, Westbank continues to handle significant percentages of traditional varieties. Westbank packs fruit for approximately 50 growers and draws fruit from approximately 1500 acres throughout the Okanagan Valley from Osoyoos to Vernon.

Impact of Replanting

All of the managers of the larger independent packinghouses viewed the present replant program as having a positive impact on their operations, positively affecting fruit quality and pack-out rates. One packer mentioned the potential negative impact of ending up with a larger number of low-volume varieties which then become difficult to sell. However, all four managers voiced strong support for the extension or continuation of a government-supported replant program.

Storage Facilities

Of the three larger independent packinghouses, only Westbank Packers has controlled atmosphere (CA) storage facilities. This provides it with the same competitive advantage in terms of market timing as the larger co-operative houses and enables them to sell fruit into late June.

Neither Fairview Orchards Ltd. nor Oliver Fruit House have CA storage, although Fairview Orchards does have a significant volume of high quality regular cold storage space. As a consequence, the majority of their fruit must be packed and sold by the end of December.

Packinghouse Capacities and Costs

In terms of line capacity, Westbank packers can sort, grade, size and pack approximately 225 - 250 bins of apples per day, whereas Fairview Orchards and Oliver Fruit House can handle between 110 and 125 bins each per day. Both Westbank and Fairview use computerized colour sorters and automatic tray feeders. Oliver Fruit House uses a mechanical sizer, rotating sorting tables and a visual grading system. All three houses operate a 'commit to pack' operation where the fruit goes from the bin to a packed box. Westbank employs approximately 40 people on a seasonal basis whereas Fairview Orchards and Oliver Fruit House employee about 20 people each in their packinghouse operations.

Grower Returns

The larger independent packers were reluctant to provide information on grower returns. Although we obtained prices from one packer, the data cannot be published without violating client confidentiality.

Under a rebate buying program, B.C. Tree Fruits sets variety-based sales targets for its major customers. Depending on the number of targets met, BCTF will provide cash rebates worth up to 6% of the total value of fruit purchased. Eligibility for rebates is often tied to buyers signing exclusive purchase agreements with B.C Tree Fruits. Independent packinghouse managers and the Pro-Fresh Marketing spokesman observed that the price rebate program offered by B.C. Tree Fruits to its buyers leads to downward pressures on prices and to exclusive purchase arrangements which adversely affects market access for the independent sellers.

4.1.3 Smaller Independent Packers

Over the past ten years a significant number of smaller independent fruit packers and marketers have begun operation in the tree fruit industry. While most of these smaller operations are concentrated in the Oliver-Osoyoos area there are also some in Creston and the Similkameen valley near Cawston and Keremeos. See Appendix B for a list of known Independent Packinghouses and Appendix C for a list of other independent fruit marketers identified during the course of this study.

These independent packers range in size from very small operations that pack fruit for their own orchard and possibly five or six other growers to larger scale operations packing fruit for over 100 growers. One independent packer reported packing over 1.3 million pounds of soft fruits in 1998.

A number of the smaller independents use Nelson, Roy Associates Ltd. of Oliver as their marketing agent. As shown in Table 4.15, this marketing agency handled almost 6 million pounds of fruit in 1998 and is expanding its sales every year. The company has also recently acquired the Creston Packinghouse, which had gone into receivership.

Table 4.15 Fruit Sold by Independent Packers Through Nelson, Roy Associates, 1998

Commodity	Packed Cartons	Packed Pounds	Avg lbs. Per Ctn
Apples	101,729	3,739,091	37
Cherries	48,756	975,120	20
Peaches	25,455	509,100	20
Plums/Prunes	15,001	175,281	12
Nectarines	8,058	146,600	18
Pears	9,194	123,817	13
Apricots	5,965	76,142	13
Total	214,158	5,745,151	

Source: Nelson, Roy Associates Ltd.

None of these smaller independent packers have any real storage capacity. As a consequence, it is imperative that their fruit is packed and sold expediently.

Grower Returns

The small independent packers were, for the most part, unwilling or unable to supply average grower returns or pack-outs. However, we were able to acquire a small sample of grower returns and the average values from that limited sample are shown in Table 4.16 on the following page.

Table 4.16 1998 Average Grower Returns from Small Independent Packers*

APPLE VARIETY	$ /LB.	PEAR VARIETY	$ /LB.
Braeburn	0.250	Bartlett	0.350
Empire	0.170	Bosc	0.400
Fuji	0.250	D'Anjou	0.250
Gold Del	0.120	Flemish	0.200
Gr. Smith	0.150	Misc. Pears	0.250
Jonagold	0.160	**All Pears**	**0.323**
McIntosh	0.100		
Mutsu	0.170		
Newtown	0.100	**SOFT FRUIT**	**$ /LB.**
Red Del	0.120	Peaches	0.30
Red Rome	0.120	Apricots	0.35
Gala	0.200	Cherries - sweet	0.85
Spartan	0.150	Prunes	0.35
Sunrise	0.300	Plums	0.50
Other Apples	0.250	Nectarines	0.60
Summer Apples	0.300		
All Apples	**0.163**		

Source: Small sample of independent packers * Prices do not include culls

The higher grower returns associated with the smaller packinghouses may result from lower overhead costs. This is the reason most often cited by growers for either starting their own packing operations or choosing to ship through an independent packer.

It should be noted that shipping through an independent packer is not without risk for a grower as small independents with lower capitalization and financial depth than the majors may often have a reduced ability to pay suppliers.

4.1.4 Organic Fruit Shipments

Current organic apple production is estimated by members of organic growers' associations to be in excess of 10,000 bins or 8 million pounds annually and growing. According to individuals we spoke to in the industry, the B.C. organic apple crop for the year 2000 could exceed 12 million pounds or just under 5% of the total apple crop. There are currently about 60 B.C. growers with about 1,000 acres in organic tree fruit production generating close to $10 million in gross sales.

A large percentage of the organic production is concentrated in the Similkameen Valley near Cawston and Keremeos. This area has some natural climatic characteristics that have proven favourable to organic tree fruit production. The hot dry summers reduce the incidence of moisture-related diseases and pests like scab that are more common in the

more humid areas surrounding Lake Okanagan. In addition the development of the Sterile Insect Release program and the introduction of pheromone disruption program for Codling Moth has virtually eliminated the most serious enemy of organic apple production.

Growers are also becoming more experienced in organic production techniques. Some growers are now receiving pack-outs and cull rates on organic fruit that are the envy of traditional orchardists. Meanwhile prices remain firm at approximately 50% higher that traditionally-grown fruit. (see Table 4.17) This has lead to an increasing number of growers, especially in the Similkameen Valley, now working towards achieving organic status for their orchards by eliminating the use of non-organic fertilizers and pesticides. This has lead some individuals within the organic sector to predict a downward trend in organic prices as the increase in supply outstrips the increase in demand.

Table 4.17 Average Organic Grower Returns (1994-1996) $/LB.

Apple Varieties	1994	1995	1996	Average	Other Fruits	1994	1995	1996	Average
Akane	0.82	0.76	0.90	0.83	Cherries	1.05	1.84	2.04	1.64
Braeburn	0.00	0.71	0.84	0.52	Apricots	0.62	0.87	1.53	1.01
Criterion	0.00	0.64	0.57	0.40	Grapes	0.54	1.10	0.95	0.86
Early Gold	0.65	0.84	0.73	0.74	Peaches	0.62	0.90	1.09	0.87
Elstar	0.76	0.88	0.81	0.82	Nectarines	0.68	1.03	0.57	0.76
Empire	0.42	0.47	0.33	0.41	Plums	0.46	0.67	0.00	0.38
Fiesta	0.00	0.67	0.65	0.44	Pears	0.50	0.87	0.78	0.72
Fuji	0.81	0.85	0.83	0.83					
Gala	0.71	0.86	0.71	0.76					
Ginger Gold	0.00	0.00	0.63	0.21					
Golden Delicious	0.37	0.62	0.33	0.44					
Granny Smith	0.00	0.47	0.61	0.36					
Jonagold	0.54	0.79	0.66	0.66					
McIntosh	0.32	0.37	0.38	0.36					
Newtown	0.00	0.33	0.61	0.31					
Red Delicious	0.30	0.38	0.25	0.31					
Sanza	0.00	0.00	0.89	0.30					
Senshu	0.00	0.89	0.91	0.60					
Shamrock	0.36	1.51	0.00	0.62					
Sinta Gold	0.66	0.64	0.52	0.61					
Spartan	0.28	0.34	0.23	0.28					
Sumac	0.53	0.71	0.88	0.71					
Sunrise	0.81	0.71	0.61	0.71					
Transparent	0.42	0.52	0.76	0.57					
Tydeman	0.53	0.76	0.90	0.73					
Vista Bella	0.00	0.74	0.83	0.52					
Williams Pride	0.00	0.00	1.32	0.44					
Winter Banana	0.00	0.37	0.47	0.28					
Culls (All Varieties)	0.11	0.13	0.12	0.12					

Source: Direct Organics Plus Ltd, Cawston, B.C.

Interviews with producers and brokers indicate that most of B.C.'s organic fruit is sold in the United States. C.F. Fresh, a U.S. organic fruit brokerage firm, has an agent in Summerland. In addition sales are made through a Cawston cooperative called Direct Organics Plus as well as individual growers.

Impact of Organic Fruit Production on the Packinghouse Industry

The growth of the organic tree fruit industry has had several impacts on the packinghouse industry. A small independent packinghouse called Cawston Cold Storage is now operating in Cawston and, according to the owners, packs 99.9 % organic fruit, including pears. It has storage for approximately 5,000 bins, and packed approximately 4,000 bins (3.2 million pounds) in 1998 and will pack about 3,000 bins in 1999. Their current line capacity is about 45-65 bins per day and they plan further upgrades to the packing equipment for next year. They do not have controlled atmosphere storage but rent CA storage from OSC's facility in Keremeos.

The Okanagan Similkameen Cooperative as well as Westbank Packers now custom pack and store organic fruit. This requires some specialized procedures such as the use of specialized soaps and gloves and the use of fresh float water for transporting the apples through the packing line. As a consequence, OSC runs organic fruit on Monday mornings when the water and equipment is clean and has not come in contact with non-organic fruit. B.C. Fruit Packers Cooperative will also do special organic runs on a 'one-off' basis. There are fairly rigorous standards for the handling of organic fruit. During the early part of November, 1999, an inspector for a British buyer was touring facilities in Washington State and B.C. to see if their standards could be met and what changes or modifications might be required to meet their standards.

The growth of the organic sector provides opportunities for the packinghouse industry including the development of specialized packing facilities and the use of excess line and storage capacity for organic fruit handling.

4.2 Processing Industry Structure

The processing sector of the B.C. tree fruit industry is dominated by one large player - Sun-Rype Products Ltd. of Kelowna - who handles over 90% of the process product. Other local or provincial processors include the following:

Kettle Valley Dried Fruit Ltd., Summerland
Vincor - Jackson-Triggs Vintners, Oliver
The Okanagan Pie Company, Westbank
Wilson's Touch of Sun Dried Fruits, Osoyoos
Nature's Pop, East Kelowna
Happy Planet Foods, Vancouver

In addition, some of the major packers will ship cull fruit east to H. J Heinz of Canada in Toronto or south across the border to U.S. processors.

4.2.1 Sun-Rype Products Ltd.

Incorporated in 1946, Sun-Rype Products Ltd. is a food and beverage manufacturer and marketer based in Kelowna, with sales in excess of $80 million. Sun-Rype began as a co-operative and in 1993, the company completed a capital restructuring in order to facilitate the distribution of equity shares to its grower-owners and allow the company to move from a not-for-profit co-operative focus to a profit maximization focus.

In 1994, Sun-Rype became a reporting company and in November of 1996, completed an Initial Public Offering and listed its Class B Subordinate Voting Shares on The Toronto Stock Exchange to complete the transition to a public company. Sun-Rype's Class B shares trade on the TSE under the symbol SRF.B

Sun-Rype's History

In 1889, a group of Okanagan fruit growers founded the B.C. Fruit Growers' Association (BCFGA). Over the next 50 years, much of this cooperative's energy was channeled into the organization of an effective marketing system for its crops, culminating in the formation of B.C. Tree Fruits Limited in 1939 (for the "fresh apple" side of the business).

Although these new marketing efforts were successful, a significant portion of the growers' crop were process-grade apples ("'culls") which did not meet market standards and could not be sold. The BCFGA took the initiative at that time to create their own market for this fruit – B.C. Fruit Processing Ltd. This company began to manufacture and market the growers' juice products under the "Sun-Rype" brand name in 1946, and later the company was re-named Sun-Rype Products Ltd.

Sun-Rype Products

Sun-Rype produces a variety of fruit juices and snack foods. The range of products includes 'Blue Label' apple juice, cocktails, apple blends and other fruit-based beverages, as well as fruit leather snacks and energy bars. Sun-Rype Products Ltd. is Western Canada's largest juice manufacturer. The company produces over 80 juice-based beverages in its state-of-the-art processing plant in Kelowna.

The company's snack food portfolio includes the following products: Fruit To Go, a 100% natural fruit snack; Fruit Bars, a low-fat soft fruit-filled snack bar; and Energy To Go, a 100% fruit energy bar that is fat free, has no added sugar, colours or preservatives. Sun-Rype snack foods are available in grocery retail outlets across Western Canada as well as grocery and warehouse locations in Eastern Canada and the Western United States.

Source of Raw Materials
Sun-Rype's first preference for apples is from the Okanagan Valley. It is also Sun-Rype's cheapest source. When the valley can't supply what the company needs it will still try to use raw apples, sourced in Washington State. Then they move to concentrate. Sun-Rype requires concentrate on a continuous basis for their various products. So even in a high-volume year, Sun-Rype will take the process apples from the valley and turn some of them into concentrate.

Sun-Rype requires a specific blend of varieties to give them their unique 'blue label' taste. It's a combination of apples. Their juices can be made with several different apples, but they need a certain percentage of apples with a higher acid content (usually from the McIntosh variety) along with other varieties that provide sugar. There are some varieties that can replace McIntosh to a point, but they do need a blend.

Most of the other raw materials Sun-Rype uses come in concentrate form and are acquired from around the world. They deal with international commodity and fruit brokers. A lot of concentrates come out of Washington State, but apple concentrate, for example, could come from the Southern Hemisphere, Europe, or even China.

Location of Facilities
Sun-Rype's only owned physical plant is in Kelowna. The company has a relationship with Grey Beverages in Vancouver to pack juices in cans and glass. Grey Beverages also handles the distribution, which provides Sun-Rype with access to market channels such as corner grocery stores and the coolers inside gas station convenience stores. Sun-Rype also has a relationship with Dairyland.

Relationships With Packinghouses
Sun-Rype has entered into contractual relationships with all of the five largest packinghouses in the Okanagan whereby the packinghouses guarantee to deliver a prescribed portion of their fruit each year to Sun-Rype in return for a guaranteed market outlet for culled and diverted fruit. Sun-Rype also purchases culls from the smaller independents at the beginning of the packing season. However, their main suppliers - the five big packinghouses - keep Sun-Rype operating. They have process fruit that becomes available throughout the year because of CA storage. Sun-Rype has slab storage, but it will only hold about a day and half worth of supply.

According to Sun-Rype management, the company's main concerns are price, supply, and one of the largest is **timing.** When do the apples become available? Sun-Rype obviously can't use them all at once and they don't have any storage capacity. So, at the beginning of the season there's a huge peak in supply and then it tapers down. This creates difficulties for balancing Sun-Rype's workforce. Timing is also critical for the packinghouses, especially if they have a large volume of culls. If the fruit can be moved to the processor quickly they can still extract some value, whereas two weeks later it might have to go to the dump. This is why the relationship between the large packinghouse and the processor become symbiotic.
What impact has the previous re-plant program had on Sun-Rype?

Intuitively, Sun-Rype's management believes the new plantings are packing out cleaner, and when they pack out cleaner, there's less process available. However, any reductions in cull rate may be offset by overall increases in yields.

4.2.2 Kettle Valley Dried Fruit Ltd.

Kettle Valley Dried Fruit Ltd (KVDF) began operations in Summerland just over two years ago and is rapidly becoming the Okanagan valley's second most important tree fruit processor. KVDF's current consumption is 28,000 pounds of fruit per day. Based on a six-day work week, that translates to approximately 8.7 million pounds of fruit a year or four and a half thousand tons annually. Kettle Valley Dried Fruit has managed to acquire process fruit from virtually all of the major packing houses as well as from some of the independents.

In addition to process apples from the Okanagan (mostly Red Delicious), the plant buys raspberry, strawberry and blueberry concentrates from Pacific Coast Fruit in Abbotsford, apricot concentrate and puree out of the United States and apple puree out of Chile.

KVDF's main products include fruit leathers, a 20g fruit bar and energy bars. Some products are marketed under the company's own brand while others are sold under other company's brand names. An estimated sixty percent of the company's sales are into the U.S. and this is a growing trend. Kettle Valley recently opened a U.S. sales office in Philadelphia. The company estimates its annual gross revenue will be approximately $2.2 million dollars and is on the verge of becoming profitable. Kettle Valley Dried Fruit employs about 40 people with an annual payroll of approximately $700,000. The owner says the company is just reaching what he calls 'critical mass'. However, this year could prove to be a critical one for KVDF. While on the output side demand for product is increasing and sales are expanding, on the input side the company is facing a shortage of raw materials including restrictions on the company's ability to import apples from the United States. This has the potential to bankrupt the company. However, if the plant can't establish a secure supply of raw materials, the only choice for the owners may be to move the operation south of the border to Yakima.

4.2.3 Jackson-Triggs Vintners (VINCOR), Oliver

VINCOR - one of B.C.'s oldest wineries has been operating under the Jackson-Triggs name for the last six years. However, there has also been significant consolidation in the wine business and VINCOR is now composed of several firms including Growers Cider, St Michael Wineries, Brights and Cartier with a lineage that dates back to 1874.

Jackson-Triggs Vintners have plants across Canada. In B.C., they purchase approximately 500 tons of apples annually from both packinghouses and individual growers to produce "Growers Cider". Growers Cider is sold and distributed through B.C. Liquor Distribution Branch outlets as well as beer and wine stores and restaurants. Vincor sells about a million cases of sparkling cider annually for gross sales of approximately $12 million. The cider bottling process is integrated with the rest of the

wine bottling facility but is estimated to provide full time employment for approximately 10 -12 people.

4.2.4 Nature's Pop, East Kelowna

Nature's Pop is a small family-owned and operated company based in East Kelowna that produces a premium sparkling apple juice sold under the trade name "Applessence". They also produce a sparkling peach blend juice. The product is bottled in a champagne-type container and distributed through the Overwaitea/Save-On-Foods grocery chain as well as through local wineries in the Okanagan Valley. Nature's Pop buys approximately 80 tons of process apples a year all from Westbank Packers. Varieties of choice are Spartan, Golden Delicious and Red Delicious. Annual gross sales are estimated at $150,000.

4.2.5 The Okanagan Pie Company Ltd.

The Okanagan Pie Co. was established in Kelowna in November 1996. The company started as a family business and now has two full-time and eight to nine part-time employees working five days a week. Plant consumption of raw process apples varies from day to day and is currently at approximately 1,500 pounds per day or 400,000 lbs. per annum, obtained primarily from Westbank Packers. The company currently produces 300 to 400 pies per day and markets them into both Alberta and British Columbia. Gross sales for 1999 are expected to reach approximately $400,000. The owner has future plans for major expansion and diversification of the product line to include individually quick frozen (IQF) sliced and diced fruits. He is also exploring export sales to both U.S. and offshore markets.

4.2.6 Wilson's Touch of Sun Dried Fruits Ltd, Oliver

Wilson's Touch of Sun provides the processing capability for the independent packinghouse known as Tamri Orchards. The company processes approximately 5 million pounds of fruit annually into juice, purees, dried fruit, jams, jellies and fruit leathers. Wilson's Touch of Sun employs between 7 to 10 people and generates gross sales between $1 and $2 million annually. The majority of the products are sold domestically under the 'Touch of Sun' label, while about 10% of the product is exported to the United States.

4.2.7 Happy Planet Foods

Happy Planet Foods of Vancouver produces a line of fruit juices and fruit 'smoothies' that are marketed throughout Canada and the United States. The majority of sales are domestic with only five to ten percent going to the export market. Products are sold through natural food stores and well as Starbucks and Safeway. Happy Planet utilizes approximately 38,000 lb. of process apples a week or almost 2 million pounds per year. The majority of these cull apples come from B.C. Fruit Packers and SunFresh in the Okanagan. Happy Planet has approximately 50 employees, 20 of which work in the production plant.

4.2.8 Out of Province Sales

In addition to sales to local companies, processed fruit is occasionally shipped out of the province. In the past B.C. Fruit Packers has sold cull fruit to H.J. Heinz of Ontario and other packers have reported sales to U.S. processors. This occurs in high volume years when local processors cannot handle the process crop fast enough.

4.3 Contributions of Packinghouses and Processors to the Local Economy

Each of the four major packing houses make significant contributions to the local economy. They provide hundreds of direct and indirect jobs, and they pay sizable amounts in municipal taxes which supports local services and infrastructure. Table 4.18 summarizes these contributions.

Table 4.18 Contributions of the Co-op Packinghouses to the Local Economy

Name of Organization	Full-time Employees	Seasonal Employees	Annual Payroll $ Million	Annual Municipal Taxes $ Million
B.C. Fruit Packers Cooperative		400*	7.5	0.50
Okanagan North Growers Cooperative	11	175	3.0	0.17
SunFresh Cooperative Growers	20	80	3.5	0.11
Okanagan Similkameen Cooperative	80	25	2.3	0.25
TOTAL	111	680	16.3	1.03

Source: Interviews with Packinghouse General Managers *Approximately 8 months annually

A number of the packinghouse managers also pointed out that employment in this sector is generally unskilled and vulnerable to economic downturns. The independent packing houses also contribute to the local economies of the Okanagan Valley. Westbank Packers, the largest of the independent packers, employs about 20 people on a full-time basis and another 40 on a seasonal basis with an annual payroll of approximately $1.3 million. They also purchase another $1.4 million worth of supplies and services. Fairview Orchards and Oliver Fruit House each employ approximately 20 people in their

packing facilities with annual payrolls worth approximately $250,000 each. Many of the smaller packing houses employ five or six people, so the combined direct employment from all of those facilities probably exceeds 100 people on a seasonal basis with combined wages that exceed a million dollars.

Sun-Rype, the largest of the processors, has approximately 300 unionized employees in the plant drawing wages ranging from $10 to $22 per hour with plant payroll in excess of $10 million. In addition, Sun-Rype employs approximately 150 office and professional staff. Kettle Valley Dried Fruits currently employs approximately 40 people with an annual payroll of approximately $700,000.

5. Trends and Future Projections

There appear to be two opposing trends in the packinghouse sector - one towards consolidation and the other towards fragmentation. Several of the managers of the larger co-operative packinghouses suggested that one trend probably spawns or at least enables the other to occur.

On the one hand, large packinghouses continue to consolidate. This is a not a new trend in the Okanagan Valley. At one time there were 15 to 20 co-operative packinghouses spread throughout the valley. The drive for plant efficiency and economies-of-scale has resulted in continuous consolidation to today's structure where there are now only four large co-operative packinghouses remaining. The most recent merger of Naramata and Monashee to form SunFresh occurred less than three years ago. In recent times the move towards consolidation is also being driven by a parallel consolidation that is taking place at the buyer level. Whereas in the past packinghouses and their sales agents used to sell to individual buyers in each of the major cities, the major grocery and produce retailers now have one buyer representing all of Western Canada. This consolidation of buying power along with the emergence of big-box superstores has placed new pressures on suppliers to have the ability to fill large-scale orders on a continuous basis with consistent product. This is difficult to achieve with a fragmented supply chain. The most common strategic response is for the packinghouses to consolidate as well in order to assemble larger quantities of fruit and gain some operational and managerial efficiencies.

On the other hand, there appears to be a growing trend towards a proliferation of small independent packinghouses, primarily in the southern end of the Okanagan Valley. One of the managers of the larger co-operative packinghouses suggested that this was a natural response or reaction to the concentration of power that has occurred through the consolidation of the larger houses. In his view, a certain segment of any population will respond to the creation of monopoly market power by setting up their own independent marketing structures. In fact, one could not exist without the other. The large co-ops feel they create a price and market structure "umbrella" for the smaller independents to operate beneath.

In speaking to the owner/operators of the independent packinghouses and their marketing agents the two most common themes were price and quality. Many stated their view that

that the large packinghouses do not provide adequate grower returns. They attribute this to several factors including price pooling, the pro-rated delivery system and lack of incentives within B.C. Tree Fruits marketing structure as well as packing facilities with large overhead expenses. Many of the independents also feel the large co-operatives place too much emphasis on volume and not enough on quality. They feel that in many cases this has provided an opportunity for the smaller independents to develop niche markets focused entirely on product quality.

More recently, the independents have begun to show signs of their own consolidation, at least at the marketing level. Whereas many of the independents provided their own marketing services in the past, Nelson, Roy Associates Ltd now acts as the marketing agent for at least eight independent packing houses. Pro-Fresh Marketing Ltd. acts as the exclusive marketing agent for both Westbank Packers and Fairview Orchards as well as a number of independent cherry growers.

Another trend within the B.C. tree fruit industry is the emergence of the organic grower. With production rapidly approaching 10 million pounds and growing annually, organic tree fruit production has shifted from a lifestyle to a serious commercial venture. In terms of the packinghouse industry, this has created opportunities for small packers to specialize in this area as well as opportunities for larger packers to offer custom packing and storage services.

6. Comparisons with Other Jurisdictions

6.1 The Move to Globalization

The tend towards consolidation is a global phenomena. In the December 1998 issue of The World Apple Report, the editor is quoted as saying, *"...it would appear that the global produce industry is moving towards the second, concentrated model. ...The Chairman of Royal Dutch Ahold has argued that the global retail scene (both food and nonfood) will be dominated by a few global players, and that only Ahold, Metro (Germany), WalMart (U.S.) and Carrefours (France) presently have the capacity to be effective global players. This would suggest that many other chains such as Tesco and Sainsbury in the U.K., Auchan and Promodes in France, and Kroger and Safeway in the U.S. could begin to expand across borders the way they have domestically in order to become global contenders.*

In competing with each other, global retailers will be using their huge bargaining power in price negotiations to get economies in buying. Because they will not want to retain thousands of suppliers in each country in which they operate, there will be a bloodbath as they select which suppliers will be retained.

In a continued drive for internal operating efficiencies, they will want to partner with those suppliers that can serve their far-flung outlets continuously and efficiently. Finally, they will want much more control over the appeal of the products they provide to consumers. Retailers who want to dictate specifications in nonfoods such as washing machines and hairdryers, will increasingly seek to do the same in apples, lettuce and other produce.

Only a few suppliers in the world have the structures in place that will be needed if they are to be chosen automatically by global retailers. These are firms such as Dole, Chiquita or Fyffes which already have multi-national, multiproduct, branded operations.

Much of the rest of the produce world will have a less certain future. Operations with primarily a single-country base, including national operations like ENZA in New Zealand, Unifruco in South Africa, and ***B.C. Tree Fruits in Canada****, cooperatives such as Snokist and Sunkist, or private companies such as Stimilt or Pandol, will face the same challenge - how to be assured of qualifying as favored suppliers.*

Do they become a large fish in a national pond, a small but growing fish in an international pond, or do they aim for the big leagues as a multinational company? Each of these options carries its own potential rewards and its own risks.

In addition, what about the thousands of suppliers who currently have healthy business niches? Can those niches be nurtured and expanded (for example with specialty varieties or products), or will those niches be squeezed by the expansion of the majors? Will substantial retail niches remain to be served as the major chains continue to grow?

Many people are asking whether the more rigid specifications of global retailers and multinational shippers can continue to be supplied by millions of small producers in many locations with limited control of uniformity, quality and value. Already, many shippers are trying to winnow out their weak growers. Others are reducing their dependence on small growers and increasing the proportion of their needs coming from their own orchards with a goal of reducing costs and improving quality control.

Even large specialist orchards are nervous about their place in the supply system. As more shippers and packers become integrated operations, the specialist orchards risk losing access to the more desirable packers and shippers. Their option is to merge or build alliances with one of the better packer-shippers. ....

...While these trends work themselves out, growers, packers and shippers; districts, regions and countries; cooperatives, associations and commissions; and government programs and policies will have to make major adjustments in their thinking and planning for the future.

The retail system is likely to continue to change dramatically around the world, forcing changes back through the marketing system...Each notch that the system moves away from the traditional pattern will force all the players in the produce business to redefine their roles."[1]

[1] The World Apple Report, Volume 5, Number 12, Belrose Inc, Pullman WA, USA, December, 1998.

Appendix A

List of Persons Interviewed for the Packinghouse /Processing Profile

In-person Interviews:

Ivor Marshall, General Manager of Westbank Packers
Ian Robertson, General Manager, SunFresh
Alan Tyabji, General Manager, Okanagan Similkameen Coop
Richard King, General Manager, B.C. Fruit Packers
Gary Schieck, General Manager, Okanagan North Growers Cooperative
Robert Dick, Vice-President, Manufacturing, Sun-Rype Products Ltd.
Rick Machial, Owner, Fairview Orchards Ltd.
Herb Sandu, Owner, Oliver Fruit House
Christopher Jentsch, Owner, Jentsch Fruit Co.
Jesse Sandhu, Owner, Mallwa Produce
Lyle Dawson, Owner, Dawson Farms
John Fierra, Grower/Packer, Oliver
Harvey Demelo, Grower/Packer, Desert Fruit,Osoyoos
Robert and Raju Commander, Organic Growers, Naramata
Brian Mennell and Linda Edwards, Organic Growers, Keremeos
J.M. (Yogi) Krehbiel, Pro-Fresh Marketing International Ltd.
Graham Nelson and Randy Roy, Nelson-Roy Associates Ltd.
Ken Ziebart, Agricultural Risk Management, BCMAF, Oliver
Wray McDonnell, Agriculture Industry, BCMAF, Kelowna

We also held telephone interviews and conversations with:

Rita Yastremski, C.F. Fresh (Organic Brokers), Summerland
Glen Lucas, B.C. Fruit Growers Association
Tom Fernandes, Grower/Packer, Osoyoos
Dan Taylor, co-owner, Cawston Cold Storage Ltd., Cawston
John Boot, Kettle Valley Dried Fruit Ltd, Summerland
Ron Enright, Okanagan Pie Company Ltd., Kelowna
Stacey Wilson, Touch of Sun Dried Fruits Ltd, Oliver
Nancy Korva, Happy Planet Foods, Vancouver

Appendix B

List of Independent Packinghouses

Name	Owner/Manager	Location
Tom Fernanades	Tom Fernanades	Osoyoos
Tamri Orchards	Dave Bassi	Osoyoos
Black Sage	Ron Fournier	Oliver
Fairview Orchards	Rick Machial	Oliver
Oliver Fruit House	Herb Sandhu	Oliver
Gemini Fruit	Harj Dhillion	Oliver
Christopher Jentsch Fruit Co.	Chris Jentsch	Oliver
Mallwa Brothers	Roop Smagh	Oliver
Mallwa Produce	Jesse Sandhu	Osoyoos
John Fierra	John Fierra	Oliver
Dawson Farms	Lyle Dawson	Osoyoos
Hans Karow	Hans Karow	Oliver
Paulson Orchards	Paul Kalkat	Osoyoos
Grant Thelin	Grant Thelin	Oliver
Cawston Cold Storage (Organic)	Dan Taylor/Billy Potash	Cawston
Desert Fruit	Harvey Demelo	Osoyoos

Appendix C

List of Other Independent Fruit Packers

Name	Owner/Manager	Location
Suki Brothers		Oliver
Anarama Orchards	Jesse Brar	Oliver
Ever-Krisp Wholesale	Angelo Disimo	Kelowna
Martin Roth (Organic)		Oliver
Cherries Kokanee		Creston
Kootenay Orchards		Creston
Hankers Fruit Ranch		Cawston
Painter's Orchard Market		Westbank
Sunshine Fruit		Summerland